

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

1. (currently amended) Piezoeeramic A piezoceramic composition with the general molecular formula $Pb_{1-a}RE_bZr_xTi_yTR_zO_3$ $Pb_{1-a}RE_bZr_xTi_yTR_zO_3$, where a, x and y are each greater than 0, in which

- RE is at least one rare earth metal selected from the group consisting of europium, gadolinium, lanthanum, neodymium, praseodymium, promethium and/or and samarium with a rare earth metal proportion b,

- TR is at least one transition metal selected from the group consisting of chromium, iron and/or and manganese with a transition metal valency W_{TR} and a transition metal proportion z and

- The a following relationship applies: $z > b/(4 - W_{TR})$.

2. (currently amended) Piezoeeramic The piezoceramic composition in accordance with claim 1, in which wherein the rare earth metal proportion is selected from a range of 0.2 mol% to 3 mol%.

3. (currently amended) Piezoceramic The piezoceramic composition in accordance with Claim claim 1, in which wherein a sum of the rare earth metal proportion and of the transition metal proportion is less than 6 mol%.

4. (currently amended) Piezoceramic The piezoceramic composition in accordance with claim 1, in which wherein the RE is a single rare earth metal and TR is selected from at most two transition metals or TR is a single transition metal and RE is selected from at most two rare earth metals.

5. (currently amended) Piezoceramic The piezoceramic composition in accordance with claim 1, with wherein a value for a mechanical quality factor Q_m which is selected from a range of 50 up to and including 1800.

6. (currently amended) Piezoceramic The piezoceramic composition in accordance with claim 1, with wherein the composition has a Curie-temperature T_c lying above 280°C.

7. (currently amended) Method A method for producing a piezoceramic composition in accordance with one claim 1, comprising growing at a specific sinter temperature in which a maximum particle growth of the piezoceramic composition is determined at a specific sinter temperature.

8. (currently amended) ~~Method~~ The method in accordance with ~~Claim~~ claim 7, where wherein the following steps are performed:

- a) ~~Definition of defining~~ the rare earth metal proportion b,
- b) ~~Definition of defining~~ the transition metal proportion z,
- c) ~~Sintering of sintering~~ the piezoceramic composition at the sinter temperature, and
- d) ~~Determining determining~~ a particle size of the sintered piezoceramic composition and
- e) ~~Repeating steps b) to d), with the transition metal proportion z being varied.~~

9. (currently amended) ~~Method~~ The method in accordance with ~~Claim~~ claim 7, where wherein the transition metal iron ~~with has~~ an iron proportion z_{Fe} and the transition metal manganese ~~with has~~ a manganese proportion Z_{Mn} ~~being used~~, so that the relationship to $z_{Fe} + 2 \cdot Z_{Mn} > b$ is produced and with the variation of the manganese proportion Z_{Mn} , ~~essentially the a~~ dissipation factor $\tan \delta$ of the composition and with ~~the a~~ variation of the iron proportion z_{Fe} , ~~essentially the setting a~~ maximum value particle growth of the composition ~~are set~~.

10. (currently amended) Piezoceramic The piezoceramic
body with a piezoceramic composition in accordance with claim 1.

11. (currently amended) Piezoceramic The piezoceramic
body in accordance with ~~Claim~~ claim 10, ~~featuring wherein~~ a
metallization is selected from at least one of the group
consisting of silver, copper and/or and palladium.

12. (currently amended) Piezoceramic The piezoceramic
body in accordance with ~~Claim~~ claim 11, ~~in which wherein~~ a
proportion of palladium is selected ranging from 0% up to [[an]]
and including 30%.

13. (currently amended) Piezoceramic The piezoceramic
body in accordance with ~~Claim~~ claim 12, ~~in which wherein~~ the
proportion of palladium amounts to a maximum of 5%.

14. (currently amended) Piezoceramic The piezoceramic
body in accordance with claim 10, ~~featuring wherein~~ a monolithic
multilayer construction in which piezoceramic layers with the
piezoceramic composition and electrode layers with the
metallization are arranged alternating above one another.

15. (currently amended) Piezoceramic The piezoceramic
body in accordance with claim 10, which is a component selected
from the group consisting of an actuator, a bending converter, a
motor and/or and a transformer.

16. (currently amended) Method A method for producing a piezoceramic body, ~~with the steps comprising:~~

f) — Provision of providing a green body with a piezoceramic composition in accordance with claim 1; and
g) — Sintering of sintering the green body to the piezoceramic body.

17. (currently amended) Method The method in accordance with ~~Claim~~ claim 16, ~~where~~ a wherein the green body is provided with a metallization which is at least one selected from the group consisting of silver, copper and/or and palladium.

18. (currently amended) Method The method in accordance with ~~Claim~~ claim 16, ~~where~~ wherein the sintering is undertaken in an oxidizing or reducing sinter atmosphere.

19. (currently amended) Method The method in accordance with [[one]] claim 16, with wherein a sinter temperature ranging from 900°C to 1100°C inclusive being is selected for sintering.

20. (currently amended) Method The method in accordance with [[one]] claim 16, ~~with~~ a wherein the green body with a plurality of particle growth seeds being is used with the piezoceramic composition.